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# CULTURE OF SOFT CLAMS

The soft clam (Mya arenaria) which is also called "soft-shelled clam," "long-necked clam," and "long-clam," is found along our Atlantic Coast from South Carolina to the Arctic Ocean. These animals are very abundant along the coast of New England, especially in Maine and Massachusetts, but are rarely encountered south of Cape Hatteras.

Soft clams begin spawning in the spring and early summer when the water temperature reaches 55.0 or 60.0 F. Along the New Jersey coast this occurs during May and early June; in Long Island Sound and Narragansett Bay, in June; around Cape Cod, in June and July; and north of Boston, late in July. The spawning season lasts about 3 months in Massachusetts, and from 4 to 6 months in New Jersey. The sexes in adult clams are separate, and males and females occur in approximately equal numbers. In New England waters most of the young clams are ready for their first spawning in the early summer, when they are about 1 year old.

In establishing a clam farm foremost consideration should be given to the selection of the flats which are to be used for the cultivation. A good flat should have compact soil which, nevertheless, would permit comparatively easy digging. A mixture of fine sand and mud in the ratio of 2 parts sand and 1 part mud is considered the most desirable soil. Since the growth of clams depends to a large extent upon the circulation of water, it is desirable to have the flat located where there is a good current. The clam farm should be far removed from any sources of domestic or industrial pollution. Clams grow in water, the salinity of which may range from 8 to 28 parts per thousand. Usually their tolerance to changes in salt content of the water is very great. Although the natural habitat of the soft clam is between the tide lines it thrives beneath the low water mark.

The ground for a farm should be chosen near the areas where a natural set of young clams occurs. Proximity of natural setting areas will eliminate the difficulties of transporting young clams a long distance. Because small clams are extremely fragile many of them may be damaged during transportation. Unfavorably high temperature also may cause considerable mortality among young animals. The best method of shipping seed clams is by packing them in boxes or barrels with damp seaweed. Pieces of ice placed on top of the barrel and covered with burlap will keep young clams in good healthy condition, assuring their survival.

Before the young animals are planted in their new surroundings care should be taken to prepare the ground for their arrival. Eelgrass and other thickly growing plants should be removed, and the grounds should be cleared of all clam enemies, such as cockles and horseshoe crabs. Raking the surface of the soil sometimes facilitates the burrowing of seed clams.

The planting of seed clams consists merely of sowing these animals upon the surface of the flat. When covered by the next tide, young clams will burrow rapidly into the soil and require no further attention. If it seems probable that the animals sown on the flats may be rolled by the wave action, it is advisable to plant them at half-tide when the water is several feet deep, so that they will have enough time to burrow before the flat is exposed. Only a limited number of individuals in any area can grow without competing with each other for food and space. Therefore, not more than 25 young clams should be planted per each square foot of bottom.

The following methods may be recommended for the gathering of seed clams in the areas of heavy natural set: digging the set in shallow water in such a manner that the clams will be washed out of the soil by the tide; making trenches across thickly set flats into which the clams will be washed by the action of the tide and wind; in extremely heavy setting areas, gathering both soil and clams and transporting to the planting grounds; sifting the clams from the sand by using wire mesh of a sufficiently large size to retain the clams but allow the particles of sand and mud to go through. Digging the flats just prior to the setting of clams very often proves helpful in catching better clam sets.

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